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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,077	11/13/2001	Yoshihiro Katsumata	Q66820	6412

7590 06/17/2003

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EXAMINER

BISSETT, MELANIE D

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,077

Applicant(s)

KATSUMATA ET AL.

Examiner

Melanie D. Bissett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) 17-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-13 is/are rejected.
- 7) ☒ Claim(s) 14-16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/630,716.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, claims 11-15, in Paper No. 6 is acknowledged.
2. Claims 17-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Summary of the Claims

3. Claim 11 is drawn to a process of producing an ink wastage absorber by preparing a flexible polyurethane foam from a polyol, isocyanate, catalyst, and foaming agent, dipping the foam in water containing a surfactant, squeezing the water from the foam, and drying the foam. Claims 12-13 include further compression steps, and claims 14-16 limit the surfactant.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Des Marais.

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6. Des Marais teaches a method of producing polyurethane foams treated with a surfactant (abstract). The reference discloses forming a foam from a polyol, diisocyanate, catalyst, and water blowing agent (col. 3 lines 51-55). One disclosed embodiment suggests adding the surfactant to wash water, where the surfactant would remain with the foam after drying (col. 6 lines 27-44). The washing step includes adding the foam particles to a wash tank filled with wash water, compressing the foams by passing through pressure rollers, and drying the foams in a drying oven (col. 4 lines 8-33). Foams are packaged in a compressed state (col. 2 lines 14-28).

7. The examiner acknowledges that the reference does not specify the use of the foams for absorbing ink. However, it is the examiner's position that the foams of the invention are directed to absorbing liquids of mixed composition and would inherently be capable of absorbing ink waste. Regardless of the intended use of Des Marais' foams, the foams capable of absorbing ink waste can be called ink absorbers by the broadest interpretation of the claims.

8. Claims 11-13 are rejected under 35 U.S.C. 102(b) as anticipated by Richter et al. as evidenced by Merten et al.

9. Richter discloses a process of treating flexible hydrophilic polyurethane sponges with a surfactant (abstract). Richter indicates the use of hydrophilic polyurethane foams including those of US 3,388,081 (col. 4 lines 3-11). Merten teaches foams formed by reacting polyols, polyisocyanates, catalysts, and blowing agents (whole). Thus, by the mention of Merten et al., Richter suggests the use of polyurethanes formed from such

materials. The foams are compressed and dipped into an impregnation bath, where the bath contains water and a surfactant (col. 8 lines 38-61). The foams are compressed again to remove impregnant and dried. The foams having surfactant coating are compressed at a later time to incorporate saline solution (col. 10 lines 48-66).

10. The examiner acknowledges that the reference does not specify the use of the foams for absorbing ink. However, it is the examiner's position that the foams of the invention are directed to absorbing liquids of mixed composition and would inherently be capable of absorbing ink waste. Regardless of the intended use of Richter' foams, the foams capable of absorbing ink waste can be called ink absorbers by the broadest interpretation of the claims.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Des Marais in view of Richter et al.

13. Des Marais applies as above, teaching a method of dipping a polyurethane foam into a water/surfactant bath but failing to teach the step of compressing the foam before immersion. Richter teaches a process of compressing a foam, immersing the foam in a water/surfactant bath, and compressing the foam again to remove liquid (col. 8 lines 38-

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61). Richter notes that the impregnant rushes into the pores of the foam as a result of the expansion of the foam. Because of the conventionality of compressing foams before liquid impregnation, it is the examiner's position that it would have been prima facie obvious to compress the foams of Des Marais' invention prior to the washing/treating step to aid the intake of the surfactant dispersion.

Allowable Subject Matter

14. Claims 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The closest prior art, Richter et al. (US 3,961,629 A), discloses a method of compressing a foam, immersing the foam in a water/surfactant bath, and compressing the foam again to remove liquid. However, the reference does not disclose the use of the applicant's specified surfactant. It is the examiner's position that the inclusion of the applicant's specified surfactant in the polyurethane foam would provide a novel, unobvious step over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (703) 308-6539. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone

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numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

mdb
June 11, 2003



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700

L Number	Hits	Search Text	DB	Time stamp
-	10	(surfactant (surface adj active)) and (((ink with (absorber absorbent absorbing holding holder)) same (foam foaming foamable foamed)) and ((foam foaming foamable foamed) same (urethane polyurethane) same flexible))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/10 13:51
-	3	((surfactant (surface adj active)) and ((foam foaming foamable foamed) same (urethane polyurethane) same flexible) and (ink with (absorber absorbent absorbing holding holder))) not ((surfactant (surface adj active)) and ((ink with (absorber absorbent absorbing holding holder)) same (foam foaming foamable foamed)) and ((foam foaming foamable foamed) same (urethane polyurethane) same flexible)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/10 14:45
-	57	((surfactant (surface adj active)) same (squeeze squeezing compress compressing squeezed squoze compressed)) and (((foam foaming foamable foamed) same (urethane polyurethane) same flexible) and (surfactant (surface adj active)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/06/11 08:23